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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,976	07/26/2007	Siegfried Rossmann	5367-261PUS	9342

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EXAMINER	
WHITTINGTON, KENNETH	

ART UNIT	PAPER NUMBER
2858	

MAIL DATE	DELIVERY MODE
12/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/591,976	ROSSMANN ET AL.	
	Examiner	Art Unit	
	KENNETH J. WHITTINGTON	2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 8-12* is/are rejected.

7)☒ Claim(s) *7 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The Response filed September 25, 2009 has been entered and considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kakuta et al. (WO3081182), hereinafter Kakuta.

Regarding claim 1, Kakuta discloses a magnetic field sensor, comprising:

a sensor arrangement, which is supplied by a supply device and generates a sensor signal (See Kakuta FIG. 1, note sensor arrangement HE and supply device comprising drive portion of item 4);

an evaluation device, to which the sensor signal is fed and which outputs a first output signal corresponding to the amplitude of the sensor signal (See FIG. 1, note items 4, 6 and 8); and

a feedback device, to which the first output signal is fed and which controls the supply device such that the first output signal remains substantially constant (See FIG. 1, note items 16, 18, 20, 22, 24 and see page 10, lines 6-19).

Regarding claim 2, Kakuta discloses the sensor arrangement contains a Hall element arrangement, which is fed by a Hall current and generates a Hall signal as

sensor signal (See FIG. 1, not item HE), and comprising a feedback device embodied as an amplification device, to which the first output signal is fed and which controls the Hall current (See FIG. 1, note items 16, 18, 20, 22, 24).

Regarding claim 3, Kakuta discloses the first output signal corresponds to the actual value amplitude of the sensor signal and the feedback device sets the supply device with the aid of a predetermined desired value amplitude such that the amplitude of the sensor signal remains constant (See FIG. 1, note items 16, 18, 20, 22, 24 and see page 10, line 6 to page 13, line 7, note x-components held constant while y-component used for calculation).

Regarding claim 4, Kakuta discloses the Hall element arrangement detects a rotating magnetic field and a second output signal of the evaluation device corresponds to the rotation angle determined (See FIG. 1, note items 16, 18, 20, 22, 24 and see page 10, line 6 to page 13, line 7, note x-components held constant while y-component used for calculation).

Regarding claim 5, Kakuta discloses the Hall signal of the Hall element arrangement contains a first measurement signal and a second measurement signal, which is phase-shifted by 90.degree. relative to the first measurement signal (See FIGS. 1-2, note x-component sensors and y-component sensors which will provide 90 degree phase shifted signals from the rotating magnetic field).

Regarding claim 6, Kakuta discloses the evaluation device contains an analog-to-digital converter, which digitizes the sensor signal, and a computation device connected downstream, which generates the first and/or the second output signal (See FIG. 1,

note modulation portion of item 4 and item 6 create a digital signal from analog sensors HE and see item 8 which calculates peak to peak of digital signals).

Regarding claim 8, Kakuta discloses a method for the operation of a magnetic field sensor comprising:

supplying with a supply device a sensor element of the magnetic field sensors (See Kakuta FIG. 1, note sensor arrangement HE and supply device comprising drive portion of item 4); and

generating with the sensor element a sensor signal that is conditioned by means of an evaluation device to form a first output signal corresponding to the amplitude of the sensor signal (See FIG. 1, note items 4, 6 and 8), and

feeding the sensor signal to a feedback device, which controls the supply device on the output side such that the first output signal remains constant (See FIG. 1, note items 16, 18, 20, 22, 24 and see page 10, lines 6-19).

Regarding claim 9, Kakuta discloses the actual value amplitude of the sensor signal is derived from the first output signal and the feedback device sets the supply device with the aid of a predetermined desired value amplitude such that the actual value amplitude of the sensor signal remains constant (See FIG. 1, note items 16, 18, 20, 22, 24 and see page 10, line 6 to page 13, line 7, note x-components held constant while y-component used for calculation).

Regarding claim 10, Kakuta discloses a rotating magnetic field is detected by means of the sensor element and a second output signal corresponding to the rotation angle is generated by means of the evaluation device (See FIG. 1, note items 16, 18,

20, 22, 24 and see page 10, line 6 to page 13, line 7, note x-components held constant while y-component used for calculation).

Regarding claim 11, Kakuta discloses a sensor element embodied as a Hall element arrangement is arranged in such a way that the Hall signal contains a first measurement signal and a second measurement signal, which is phase-shifted by 90.degree. relative to the first measurement signal (See FIGS. 1-2, note x-component sensors and y-component sensors which will provide 90 degree phase shifted signals from the rotating magnetic field).

Regarding claim 12, Kakuta discloses the evaluation device digitizes the sensor signal by means of an analog-to-digital converter, and a computation device connected downstream of the evaluation device generates the first and/or the second output signal (See FIG. 1, note modulation portion of item 4 and item 6 create a digital signal from analog sensors HE and see item 8 which calculates peak to peak of digital signals).

Allowable Subject Matter

Claims 7 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: regarding these claims, they are allowed for the same reasons outlined in the Office Action mailed June 22, 2009.

Response to Arguments

Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH J. WHITTINGTON whose telephone number is (571)272-2264. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Kenneth J Whittington/
Primary Examiner, Art Unit 2858

kjw